AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous versions and listing of claims, which were previously presented in the instant application.

Listing of Claims:

1. (original) A controller for an induction heating system, comprising:

a control circuit operable to control the application of power from a power source to an induction heating cable; and

an interface circuit operable to electrically couple a plurality of conductors from a temperature feedback device to the control circuit, wherein the interface circuit also electrically couples each of the plurality of conductors to ground through a capacitor.

2. (original) The controller as recited in claim 1, wherein the temperature feedback device is a thermocouple.

3. (original) The controller as recited in claim 1, wherein the interface is operable to electrically couple a shielding conductor surrounding the plurality of conductors to ground.

4. (original) The controller as recited in claim 1, wherein the capacitors are adapted to shunt to ground electrical signals at the frequency of electric current from the power source.

5-10. (cancelled)

11. (currently amended) An electronic system, comprising:

an electronic circuit;

a temperature feedback device having a plurality of conductors, wherein at least one of the temperature feedback device and the plurality of conductors is disposed within a magnetic field; and

an interface operable to electrically couple the plurality of conductors to the first electronic circuit to transmit temperature data to the electronic circuit, wherein the interface electrically couples the plurality of conductors to ground through at least one capacitor configured to couple electrical noise produced ~~from~~ by the magnetic field to ground.

12. (original) The system as recited in claim 11, wherein the temperature feedback device is a thermocouple.

13. (original) The system as recited in claim 11, comprising an extension cable for coupling the temperature feedback device to the interface, the extension cable comprising a shield conductor surrounding the plurality of conductors, the shield conductor being electrically coupled to ground by the interface.

14. (original) The system as recited in claim 11, wherein the electronic system produces the magnetic field.

15. (original) The system as recited in claim 11, wherein the electronic system produces a radio-frequency electric current.

16-19. (cancelled)

20. (new) An electronic device, comprising:

an electronic circuit; and

an interface operable to electrically couple a signal representative of temperature from a temperature feedback device to the electronic circuit, wherein the interface comprises at least one capacitor configured to couple electrical noise transmitted with the signal representative of temperature to ground.

21. (new) The device as recited in claim 20, comprising the temperature feedback device.

22. (new) The device as recited in claim 21, wherein the temperature feedback device is a thermocouple.

23. (new) The device as recited in claim 20, comprising an extension cable operable to electrically couple the temperature feedback device to the interface, wherein the extension cable comprises a shield conductor surrounding a plurality of conductors operable to transmit the signal representative of temperature from the temperature feedback device to the interface.